Lower Columbia Salmon Recovery Region

PHOTOS BY CHRIS DRIVDAHL

The Lower Columbia Salmon Recovery region is in Southwest Washington. It extends from the coast to the Columbia Gorge, and is mainly forest and rural in nature. Population centers are mainly along the Interstate-5 corridor and Columbia River. The 5,700 square mile planning area (the White Salmon basin was omitted at the request of Klickitat County) included in the recovery plan encompasses the entire Washington portion of the mainstem and estuary of the lower Columbia River as well as 18 major and a number of lesser tributary watersheds.

In all, the tributaries total more than 1,700 river miles. A draft recovery plan for Washington portions of Lower Columbia River chum, Chinook, steelhead, and coastal bull trout was completed in December 2004 and approved by the National Marine Fisheries Service as an interim regional recovery plan in February 2006. A supplement for coho, which were just listed in June 2006, will be completed in early 2007.

Key Facts

LISTED FISH

Chinook (threatened)
Chum (threatened)
Coho (threatened)
Steelhead (threatened)
Bull trout (threatened)

MAJOR FACTORS LIMITING RECOVERY

- Degraded floodplain and channel structure
- Degraded nearshore/marine and estuarine conditions and habitat loss
- Degraded riparian area and loss of in-river large woody debris
- Excessive sediment
- Degraded water quality and temperature
- Impaired instream flows
- Barriers to fish passage
- Hatchery impacts
- Harvest impacts
- Predator harassment of spawners

RECOVERY PLANNING STATUS

Draft recovery plan for Washington portion of lower Columbia Chinook, steelhead, chum, and bull trout, delivered to NOAA-Fisheries December 2004. Approved in February 2006. A supplement for coho will be completed in early 2007.

REGIONAL RECOVERY ORGANIZATION

Lower Columbia Fish Recovery Board.

FEDERALLY RECOGNIZED TRIBES

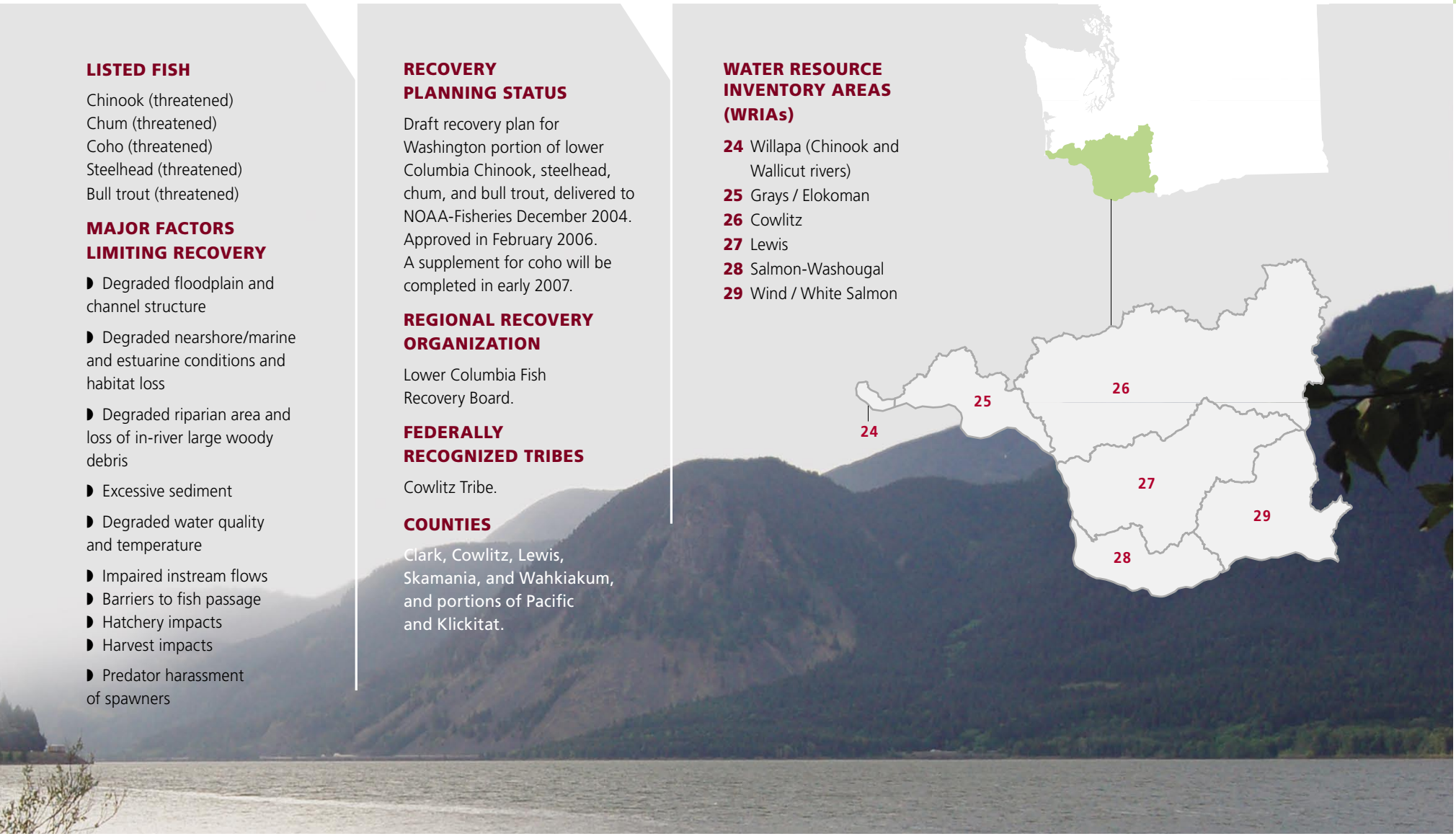
Cowlitz Tribe.

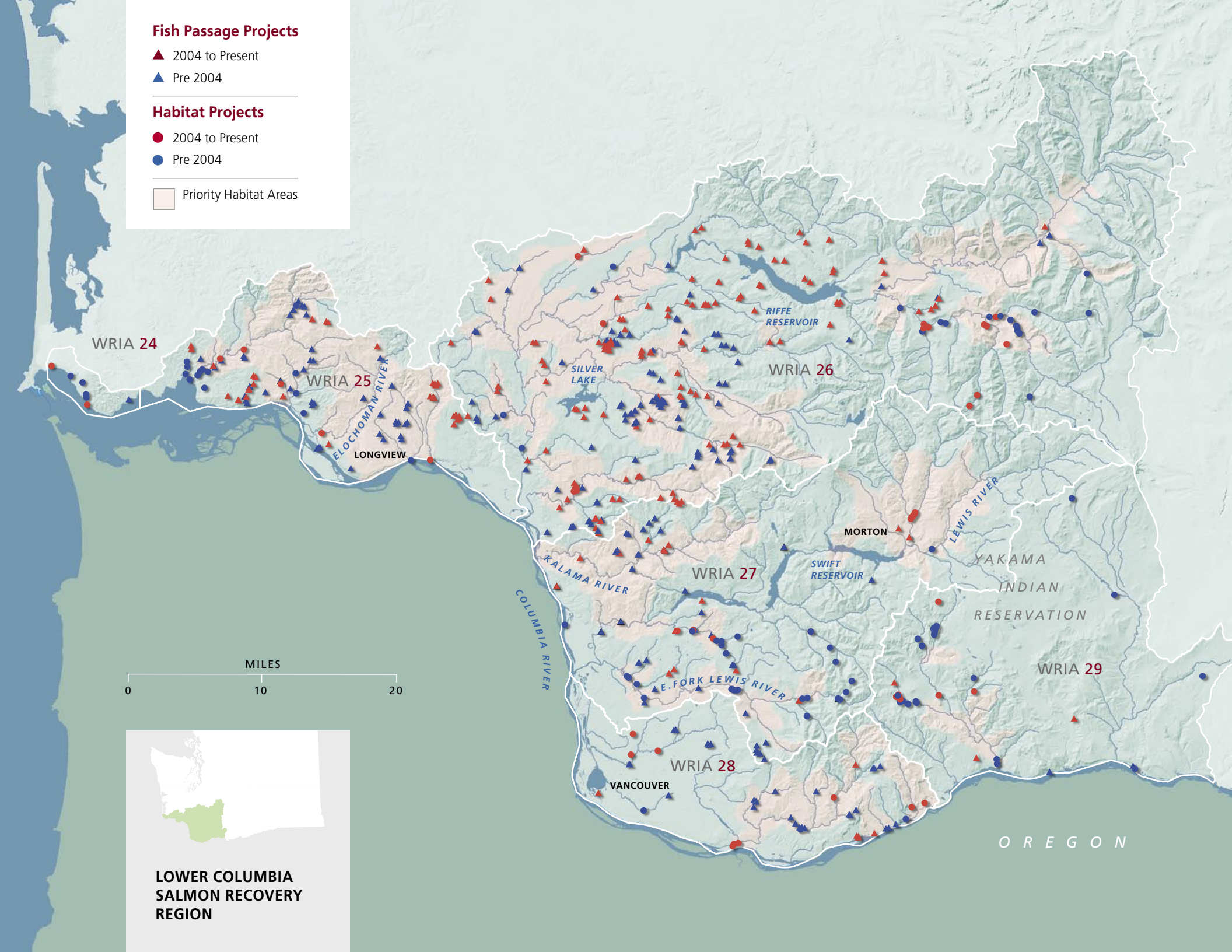
COUNTIES

Clark, Cowlitz, Lewis, Skamania, and Wahkiakum, and portions of Pacific and Klickitat.

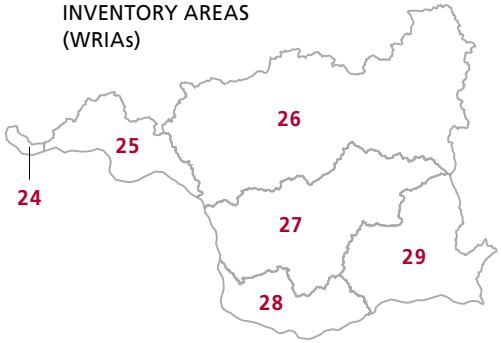
WATER RESOURCE INVENTORY AREAS (WRIAs)

24 Willapa (Chinook and Wallicut rivers)
25 Grays / Elokoman
26 Cowlitz
27 Lewis
28 Salmon-Washougal
29 Wind / White Salmon

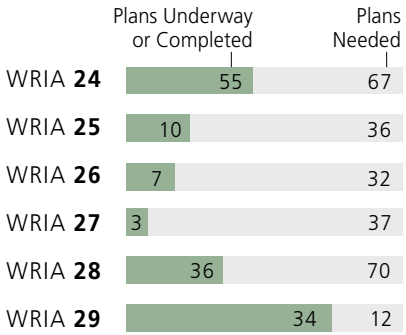



Fish Passage Projects
2004 to Present
Pre 2004
Habitat Projects
2004 to Present
Pre 2004
Priority Habitat Areas
WRIA 24
WRIA 25
WRIA 26
WRIA 27
WRIA 28
WRIA 29
ELOCHOMAN RIVER
LONGVIEW
SILVER LAKE
RIFFE RESERVOIR
KALAMA RIVER
COLUMBIA RIVER
MORTON
SWIFT RESERVOIR
LEWIS RIVER
YAKAMA INDIAN RESERVATION
E. FORK LEWIS RIVER
VANCOUVER
OREGON
MILES
0
10
20
LOWER COLUMBIA SALMON RECOVERY REGION

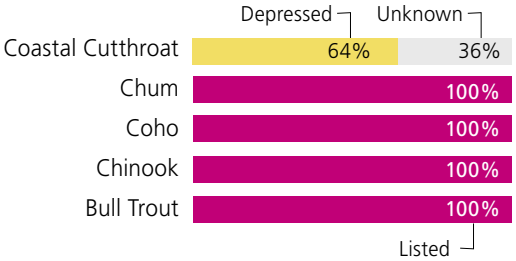
WATER RESOURCE INVENTORY AREAS (WRIAs)

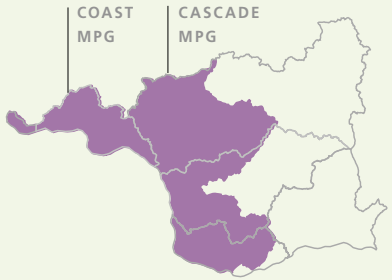


Watershed Cleanup Plans

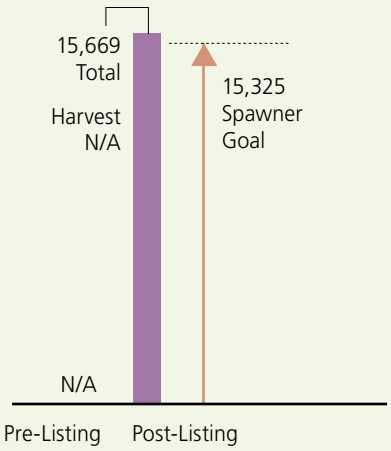


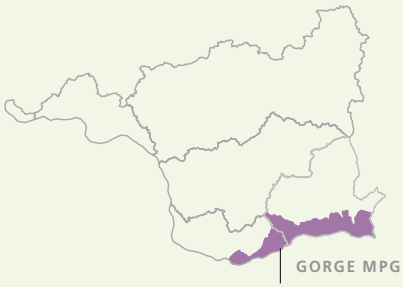
Fish Status



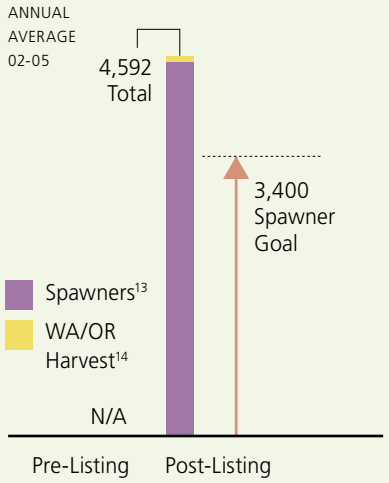


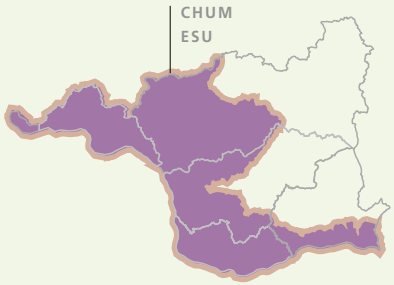
Chum Wild Adult Abundance Coast + Cascade MPG



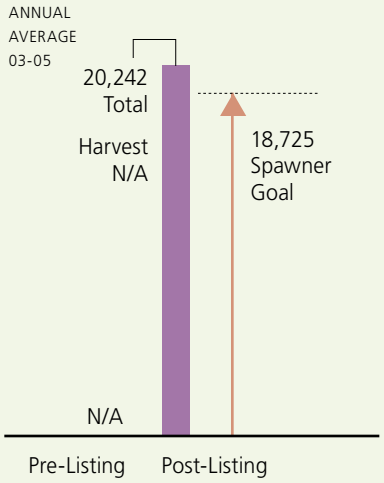


Chum Wild Adult Abundance Gorge MPG

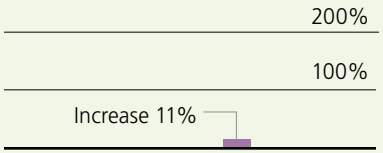


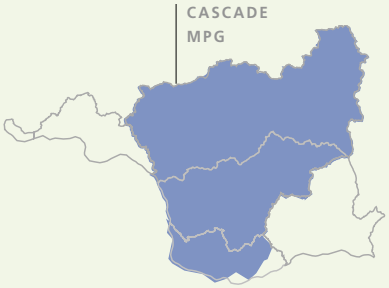


Chum Wild Adult Abundance[15] ESU Scale

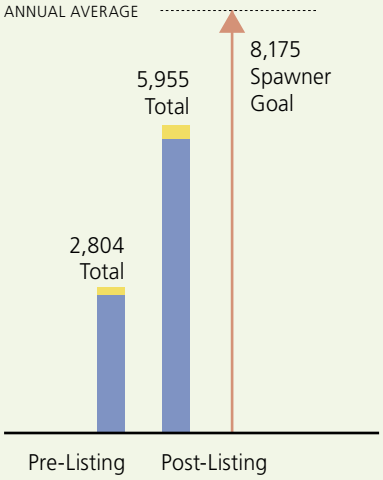


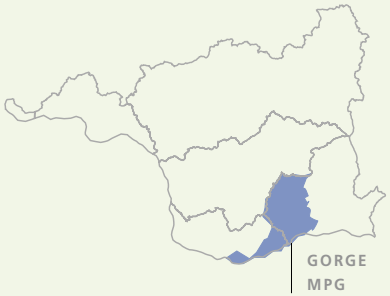
Chum Wild Juvenile Production[15] Since Listing



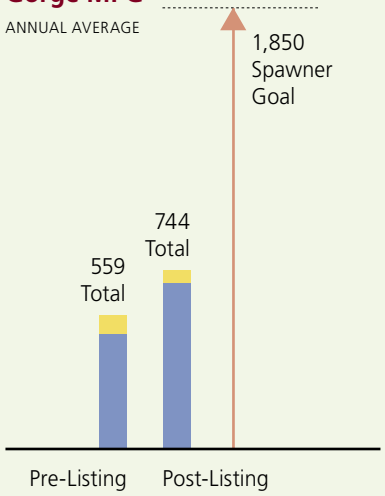


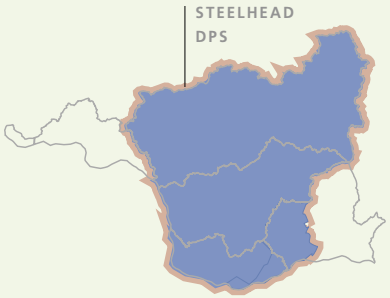
Steelhead Adult Abundance Cascade MPG



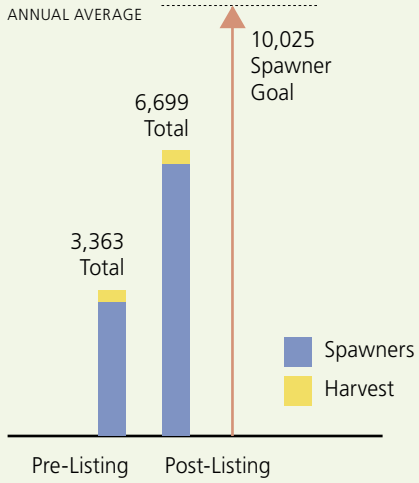


Steelhead Adult Abundance Gorge MPG

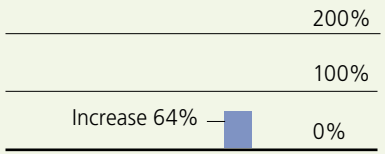


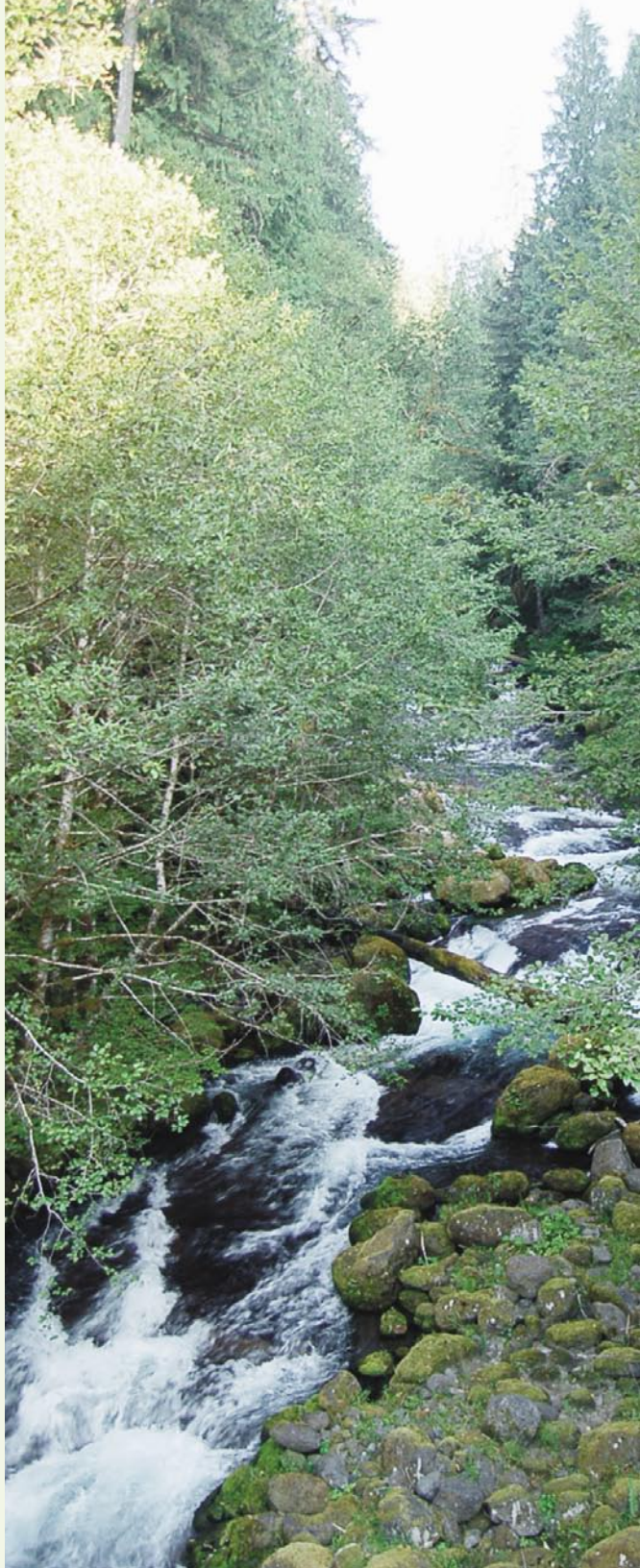


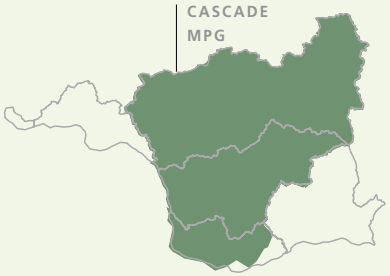
Steelhead Adult Abundance DPS Scale



Steelhead Juvenile Production[17] Since Listing

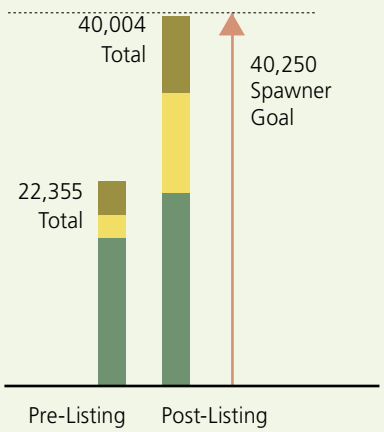






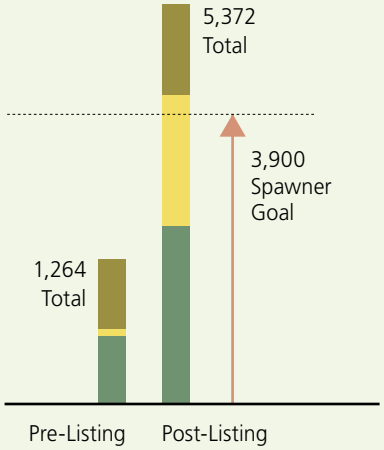
Chinook
Wild Adult Abundance
Cascade MPG

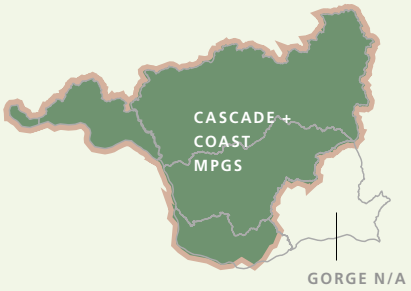
ANNUAL AVERAGE



Chinook
Wild Adult Abundance
Coast MPG

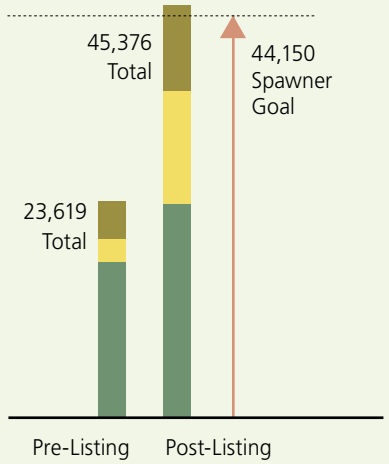
ANNUAL AVERAGE

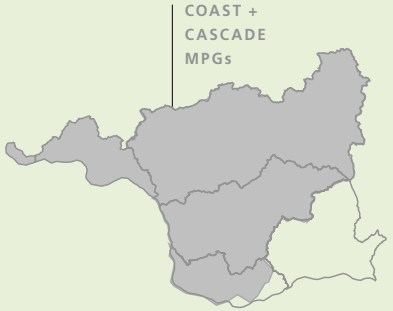




Chinook
Wild Adult Abundance
Cascade + Coast MPGs

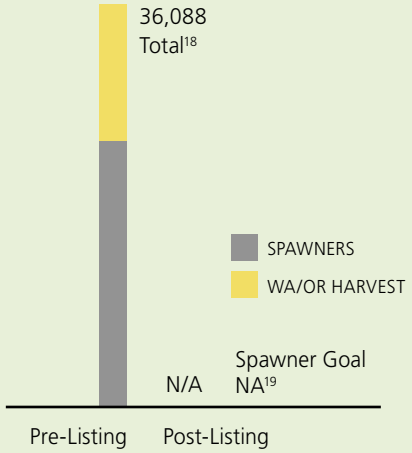
ANNUAL AVERAGE

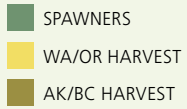




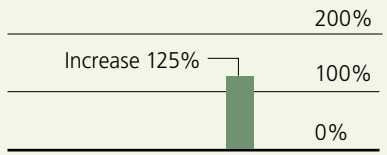
Coho
Wild Adult Abundance
Coast + Cascade MPGs

ANNUAL AVERAGE





Chinook
Wild Juvenile Production
Since Listing



Coho
Wild Juvenile Production
Since Listing

Data not available

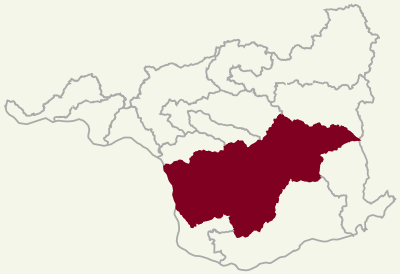
LOWER COLUMBIA SALMON RECOVERY REGION

LEWIS-KALAMA BASIN

WRIA
27

WATER RESOURCE INVENTORY AREA

Watershed Watch
Lewis-Kalama Basin WRIA 27

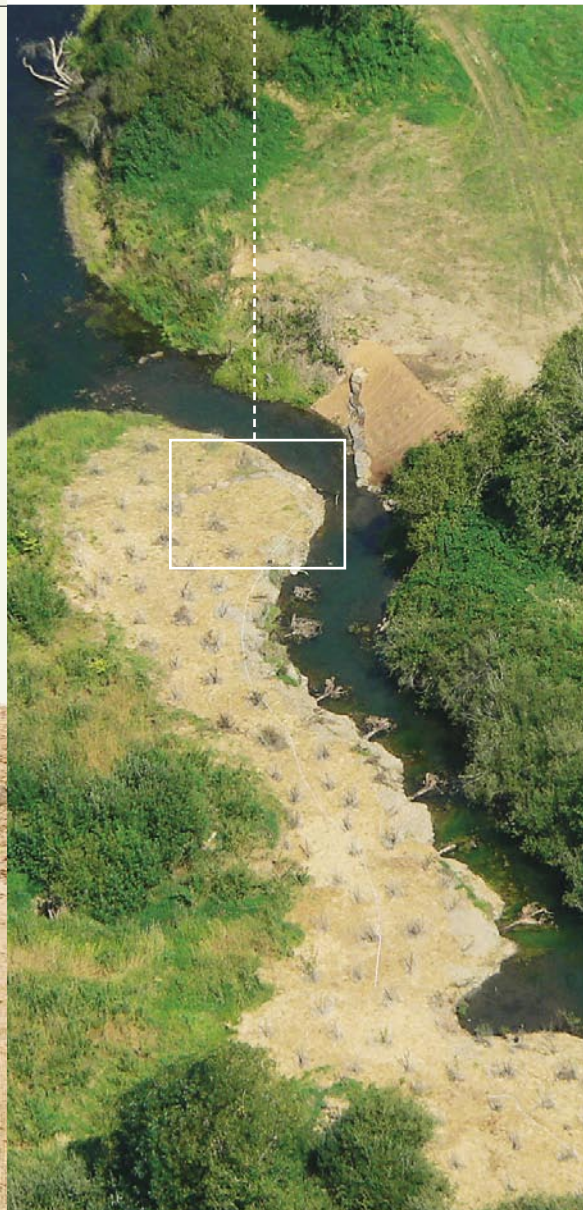


This area is located in southwest Washington in Skamania, Clark, and Cowlitz counties and includes three major rivers: the Kalama, North Fork Lewis, and East Fork Lewis. All rivers drain into the Columbia River. It covers 839,010 acres (1,311 square miles). Approximately 44% of the land is managed by the US Forest Service, while another 19% is managed by private and state timber owners.

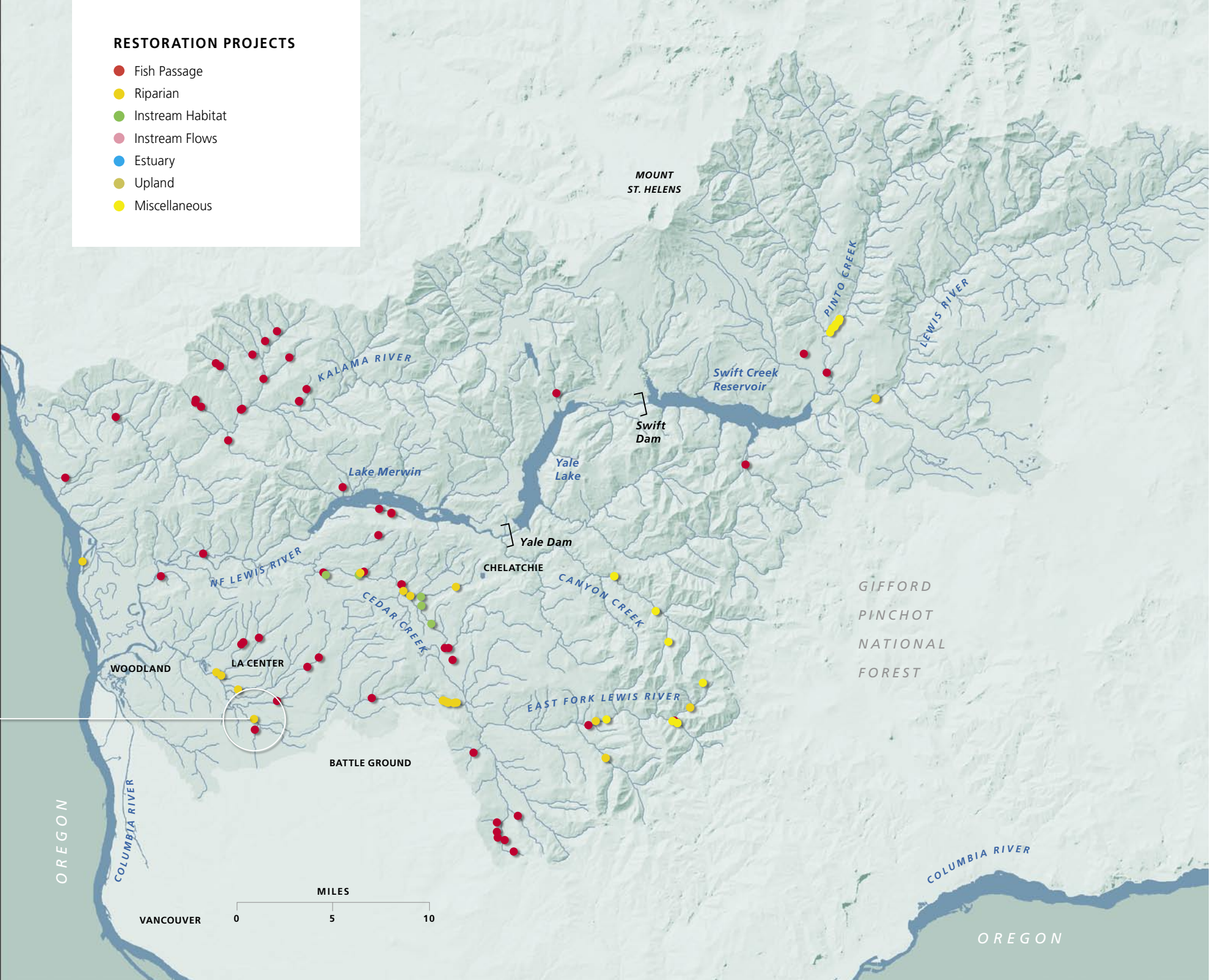
Clark County is the fastest growing part of the watershed, where population has tripled since 1960. Major impoundments exist on the North Fork Lewis (Swift, Yale, and Merwin Reservoirs). 14,300 live in North Fork Lewis River sub-basin, 5,300 live in the Kalama River sub-basin, and 24,400 reside in the East Fork Lewis River sub-basin where population is expected to more than double by 2020.

PHOTOS BY LOWER COLUMBIA FISH RECOVERY BOARD

Habitat Improvement on East Fork Lewis River



Below: Instream Habitat Improvement on Lockwood Creek


RESTORATION PROJECTS
Fish Passage
Riparian
Instream Habitat
Instream Flows
Estuary
Upland
Miscellaneous
MOUNT ST. HELENS
PINTO CREEK
LEWIS RIVER
KALAMA RIVER
Swift Creek Reservoir
Swift Dam
Yale Lake
Lake Merwin
Yale Dam
CHELATCHIE
NF LEWIS RIVER
CEDAR CREEK
CANYON CREEK
GIFFORD PINCHOT NATIONAL FOREST
WOODLAND
LA CENTER
EAST FORK LEWIS RIVER
BATTLE GROUND
COLUMBIA RIVER
OREGON
VANCOUVER
MILES
0
5
10
COLUMBIA RIVER
OREGON

LOWER COLUMBIA SALMON RECOVERY REGION

LEWIS-KALAMA BASIN

WRIA 27

WATER RESOURCE INVENTORY AREA

Are hydroelectric facilities operating in a "fish friendly" manner?

Indicator	Measured Results
Upstream passage goals at FERC licensed facilities	Biggs Creek: **Unknown** Merwin, Swift 1, Swift 2, Yale: **Requirements in settlement agreement, license not issued**
Actual upstream passage achieved (any or all years for which data are available 1999-2006)	Biggs Creek: **Unknown** Merwin, Swift 1, Swift 2, Yale: **None**
Downstream passage goals at FERC licensed facilities	Biggs Creek: **Unknown** Merwin, Swift 1, Swift 2, Yale: **Requirements in settlement agreement, license not issued**
Actual downstream passage achieved (any or all years for which data are available 1999-2006)	Biggs Creek: **Unknown** Merwin, Swift 1, Swift 2, Yale: **None**

Are streams accessible to wild salmon?

Indicator	Measured Results
Inventory of major blockages	Complete barriers: 55 Partial barriers: 97
Miles of anadromous waters inaccessible	Not available

Are listed populations abundant and productive?

Indicator	Measured Results		
Run size achieved, 5 year average pre- and post listing. Wild component of Cascade Major Population Group.	Chinook	Pre-listing	22,355
		Post-listing	40,004
	Steelhead	Pre-listing	2,804
		Post-listing	5,955
	Coho	Data not available	
	Chum	Data not available	
Juvenile production (baseline mean, may be average of several sites)	Chinook: 77,604 Steelhead: 17,637 Coho: 68,282 Chum: 26,470		

Is water clean enough to support wild salmon?

Indicator	Measured Results
Water quality index parameters	Fecal coliform: 2 / 13 Dissolved oxygen: 11 pH: 13 Temperature: 30 / 17 Stream segments meeting standard Stream segments not meeting standard

Do rivers and streams have flows that support wild salmon?

Indicator	Measured Results
Instream flow set	Flow negotiations underway
Percent of time flow met during fish critical period **August 1 to September 30**	Not applicable.

Does harvest management protect wild salmon?

Indicator	Measured Results
Wild spawners 5 year average pre- and post listing average (Cascade MPG scale)	**Steelhead** Pre-listing 2,666; Post-listing 5,668; 10,025 RECOVERY PLAN SPAWNER ESCAPEMENT GOAL **Chinook** Pre-listing 16,002; Post-listing 20,776; 44,950 RECOVERY PLAN SPAWNER ESCAPEMENT GOAL
Percent of wild salmon run that is harvested, 5 year average pre- and post listing (Cascade MPG scale)	**Steelhead** Pre-listing **5%**; Post-listing **5%** **Chinook** Pre-listing **28%**; Post-listing **48%** **Chum** Not available **Coho** Pre-listing **34%**; Post-listing **NA**

Do hatchery practices meet the needs of wild salmon?

Indicator	Measured Results
Does a scientific evaluation of practices exist?	Yes. Recovery plan recommendations and Hatchery Scientific Review Group review
If so, what actions have been accomplished?	14 Implemented; 1 Ongoing